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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/747,007A

Input Set : A:\seqfinal2.txt
Output Set: N:\CRF4\07312003\I747007A.raw

3 <110> APPLICANT: Ouellet, Therese
4 Miki, Brian M.
5 Foster, Elizabeth
6 Martin-Heller, Teresa
7 Tian, Lining
8 Brown, Daniel C.
9 Zhang, Peijun
10 Hattori, Jiro
11 Malik, Kamal
12 Wu, Keqiang
13 Theilmann, David Allan
14 Tropiano, Raymond
16 <120> TITLE OF INVENTION: Translational Regulatory Element
18 <130> FILE REFERENCE: 08-885707US1
20 <140> CURRENT APPLICATION NUMBER: 09/747,007A
21 <141> CURRENT FILING DATE: 2000-12-21
23 <150> PRIOR APPLICATION NUMBER: US 60/172,813
24 <151> PRIOR FILING DATE: 1999-12-21
26 <160> NUMBER OF SEQ ID NOS: 33
28 <170> SOFTWARE: PatentIn version 3.1
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31 <211> LENGTH: 2224
32 <212> TYPE: DNA
33 <213> ORGANISM: Nicotiana tabacum
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40 gtcaaaaggg aacttcaccc tcctagttct ttatttccaa catacatggg gagtaatgct 180
42 aaatttacat agaagaataa taaaatgaac tgtaactaat gatgtactgt tccaaagaga 240
44 tgaggacgtc aacatattta ttccctcagg cctttcaga ataataccat aagtagaaga 300
46 aatggcacat aaaatgaagt cctcggcaag tcaaatgtaa atctgaaccc acccagctaa 360
48 cccagtgaac tcaacttcc tgatagatc agcactccct catgacatcg catgccttct 420
50 ctttaaagag ccgcttgcac tctgaaaacc aaatgaatct ccacagagag atttcgagct 480
52 ccatgagacg ccttttggtt ctgtattac taaacctata aaaatgaag gaagtaggac 540
54 aactgcattt tgccgcttaa gatgcttcgg cgcttgcgtt attttaagtc atgagaaagt 600
56 acaatgttgg aatctcacat tagaacaatg tatttgaat aaccttagaa agcaaagct 660
58 gaaggaggt gcagctaaat cttcttctac cttgttatcc ttgcatttct tgaggaggag 720
60 gaactgtcct cgcagggtca aaatctgcag tcgccccaaa ggatattcag aagtatatta 780
62 caacatgttt aatggtaac caagtggaaat atcaaaaatgc tcatttgcgtt 840
64 ctcagagcgt atctactagt tcatcaaccc agtacacatc tctgaatttc atctttgcc 900
66 gttgaactaa gtcaattggt caaagacgc taacatgaga gacactcata aaacggctga 960
68 ataaacatgca gaagacgtca tgcgccttag gtctcattat gcatgagatt attagttata 1020
70 tgctccttca gtttacttag aatgaaaaaa tcagttaaatgc ctgttaacgaa atgataacct 1080

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72	gcttcaagaa	gattagacta	ttttcataa	aatatgcagt	gccgtgaaat	agataactaa	1140
74	tcttaggcag	aaaaaatctt	ctattgggcc	ataataagaa	ctaccaatta	gaaaggaggt	1200
76	agaaaagctcc	gatactgtta	tgaaggccat	tctaagtgc	gatgtgaatt	tcccaataca	1260
78	aaatgacaac	aaaaacaaaa	gcctcaatcc	taagctagtt	ggggtcgcta	tataaatcct	1320
80	cgacatccat	ttaactccac	ttggactcct	ttcttccaa	tatttaata	ttgttagatt	1380
82	aatcataaaaa	ttgcttagct	ttctactggc	acttaaccta	ctgcaaccct	cctcttctgg	1440
84	gattccaaca	caaacaacta	agaggaattt	aaaaaaaaga	aagcaaatgt	gagaagagac	1500
86	aaaatgtaca	atgatacctc	ttcttgcaagc	aaaggaggca	ggttctctgc	tgagacaagg	1560
88	ttctcttattt	cctgcaagac	cttcgtatct	tttattcag	accatgtatg	tggaggtaac	1620
90	gccagcaata	gtgctgtcag	cacatcggtt	cttgaggggg	atcttctgca	agcatctcta	1680
92	tttcctgaag	gtctaacctc	gaagatttaa	gatttaatta	cgtttataat	tacaaaattg	1740
94	attcttagtat	ctttaattta	atgcttatac	attattaatt	aatttagtac	tttcaatttg	1800
96	ttttcagaaa	ttattttact	atttttata	aaataaaaagg	gagaaaatgg	ctatttaaat	1860
98	actagcctat	tttatttcaa	ttttagctt	aaatcagccc	caattagccc	caatttcaaa	1920
100	ttcaaatggt	ccagcccaat	tcctaaataa	cccaccccta	acccgccccg	tttccccttt	1980
102	tgatccaggc	cgttgcatt	tttgcatt	gcccagaatt	tcccctttc	cttttttaat	2040
104	tcccaaacac	ccctaactct	atcccatttc	tcaccaaccg	ccacatatga	atctcttat	2100
106	ctctcaaact	ctctcgaaacc	ttcccttaac	cctagcagcc	tctcatcatc	ctcacctcaa	2160
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115	<212>	TYPE:	DNA				
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121	catcatcctc	acctcaaaac	ccaccggaaat	acatggcttc	tcaagccgtg	gaaaccttat	120
123	actcacctcc	ctttgcttt	acagtaactcg	gccgtcgacc	gccccgtacccg	ggtgttcagt	180
125	ccctttagt						188
128	<210>	SEQ ID NO:	3				
129	<211>	LENGTH:	129				
130	<212>	TYPE:	DNA				
131	<213>	ORGANISM:	delta N with Kozak sequence				
133	<400>	SEQUENCE:	3				
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136	atcatcctca	cctcaaaacc	caccggccac	catggcctct	agaggacccc	gggtggtcag	120
138	tccctttagt						129
141	<210>	SEQ ID NO:	4				
142	<211>	LENGTH:	119				
143	<212>	TYPE:	DNA				
144	<213>	ORGANISM:	deltaN without Kozak sequence				
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158 ggatctatcc tcttattctctt caa
161 <210> SEQ ID NO: 6
162 <211> LENGTH: 24
163 <212> TYPE: DNA
164 <213> ORGANISM: Linker 2
166 <400> SEQUENCE: 6
167 atctctcaaa ctctctcgaa cctt
170 <210> SEQ ID NO: 7
171 <211> LENGTH: 18
172 <212> TYPE: DNA
173 <213> ORGANISM: Linker 3
175 <400> SEQUENCE: 7
176 ttcccccttaac ccttagcag
179 <210> SEQ ID NO: 8
180 <211> LENGTH: 24
181 <212> TYPE: DNA
182 <213> ORGANISM: Linker 4
184 <400> SEQUENCE: 8
185 atcatcctca cctcaaaacc cacc
188 <210> SEQ ID NO: 9
189 <211> LENGTH: 24
190 <212> TYPE: DNA
191 <213> ORGANISM: Linker 5
193 <400> SEQUENCE: 9
194 agcctctcat catcctcacc tcaa
197 <210> SEQ ID NO: 10
198 <211> LENGTH: 602
199 <212> TYPE: DNA
200 <213> ORGANISM: Nicotiana tabacum, rent 1
202 <220> FEATURE:
203 <221> NAME/KEY: misc_feature
204 <222> LOCATION: (1)..(602)
205 <223> OTHER INFORMATION: where n is a or t or g or c
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211 ttttaatacg actcactata gggaaagctt ataattacaa aatttgcatttctt agtattttta
213 atttatattttt tttacattttt taatttattttt agaagtttttta atttttttttc agaaatcattt
215 ttactatttt tataaaaaaca aaaggaaaaa gtggtttttta aataactagc cctatttcat
217 ttcaattata gcctaaaatc agccccaaattt aaccccaattt cccaaatttcaa acggggccagc
219 ccaatttccat aatgaccccg ctcccttaccc gctttccaa cccgccccgggt ttccctttttt
221 gatccaggtt gttgatcatt ttgatcaacg gccagaattt cccctttccctt tttaatttcc
223 caaacacccccc ccaaccccttaccc gctttccaa cccgccccgggt ttccctttttt
225 caaactctctt cgaaccccttcccttaccc gccagaattt cccctttccctt tttaatttcc
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229 aa
232 <210> SEQ ID NO: 11
233 <211> LENGTH: 610
234 <212> TYPE: DNA
235 <213> ORGANISM: Nicotiana tabacum, RENT 2

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242	agtattttta	attnaatattt	tatacattat	taatttaactt	agtactttca	attcgttttc	180
244	aaaaattattt	ttactatttt	ttgtaaaata	aaagggagaa	aatggctatt	taaataactag	240
246	ccctatttt	tttcaatttt	agcctaaaat	cagccccaa	ttaacccaa	tttcaaaattc	300
248	aaatgggaca	gcccaattcc	taaaataacc	cgcccctaac	cctttatcc	aaccaccccg	360
250	atttccccctt	ttgatccagg	ttgttgatca	ttttgatcaa	cgaccagaat	ttcccccttc	420
252	ctgttttaa	ttcccaaaaca	cccccaacc	ctatcccatt	tctcaccaac	cgccagatct	480
254	atccttctat	ctctcaaact	ctctcgaaacc	ttcccctaac	cctagcagcc	tctcatcatc	540
256	ctcacctcaa	aaccacccgg	ccaccatggc	ctctagagga	tcccccgggt	gtcagtccct	600
258	tatgtgcgtc						610

261 <210> SEQ ID NO: 12

262 <211> LENGTH: 507

263 <212> TYPE: DNA

264 <213> ORGANISM: Nicotiana tabacum, RENT 3

266 <220> FEATURE:

267 <221> NAME/KEY: misc_feature

268 <222> LOCATION: (1)..(507)

269 <223> OTHER INFORMATION: where n is a or t or g or c

272 <400> SEQUENCE: 12

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277	aataccagcc	ctatttttt	tcaattttaa	cctaaaatca	gccccagtt	gccccaaacg	180
279	gccccatccca	attcctaaaa	taactcgccc	ctaaccgct	tatccaaccc	gcccggttcc	240
281	ccttttgatc	caggccgtt	atcattttga	tcaacgacca	gaatttcccc	tttccctttt	300
283	taattcccaa	acaccgccaa	acctatccca	tttctcacca	accgcccagat	ctatccttct	360
285	atctctcaa	ctctctcgaa	ccttccctta	accctagcag	cctctcatca	tcctcacctc	420
W--> 287	aaaacccacc	ggccaccatg	gcctctagag	gatccccggg	tggtcagttc	tttatgttac	480
289	gnccctaaatg	nccgnctgn	nnnnnnnc				507

292 <210> SEQ ID NO: 13

293 <211> LENGTH: 599

294 <212> TYPE: DNA

295 <213> ORGANISM: Nicotiana tabacum, RENT 5

297 <220> FEATURE:

298 <221> NAME/KEY: misc_feature

299 <222> LOCATION: (1)..(599)

300 <223> OTHER INFORMATION: where n is a or t or g or c

303 <400> SEQUENCE: 13

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W--> 306	ctctaatang	actcaactata	gggaaagctt	ataattacaa	atttgattct	agtattttta	120
308	attnaatattt	tatacattat	taatttaattt	agtactttca	atttgtttc	agaaatcatt	180
310	ttactatgg	ttataaaaata	aaagggagaa	aatggctatt	taaataactag	ccctatttt	240
312	tttcaatttt	agcctaaaat	cagccccaa	taaccctat	ttcaaattca	aacgggctag	300
314	cccagttcc	aaaataaccc	tcccctaaacc	cgcttatcca	accggccctg	tttcccttt	360
316	tgatccaggc	cgttgatcat	tttgcataac	gacccaaaatt	tcccttcc	tttttaattt	420
318	cccaaacacc	cccaacccta	tcccatttct	caccaaccgc	cagatctatc	ctcttatctc	480
320	tcaaactctc	tcgaaccttc	ccctaaaccct	agcagcctct	catcatcctc	acctcaaaac	540
322	ccacccggcca	ccatggcctc	tagaggatcc	ccgggtggtc	agtcccttat	gttacgtcc	599

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325 <210> SEQ ID NO: 14
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 327 <212> TYPE: DNA
 328 <213> ORGANISM: Nicotiana tabacum, RENT 7
 330 <220> FEATURE:
 331 <221> NAME/KEY: misc_feature
 332 <222> LOCATION: (1)..(616)
 333 <223> OTHER INFORMATION: where n is a or t or g or c
 336 <400> SEQUENCE: 14

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339	aacagctatg	accatgatta	cgccaagctc	taatacgact	cactataggg	aaagcttata	120
341	attacaaaat	tgattatagt	acttttaatt	taatatttat	acattattaa	ttaatttagc	180
343	actttcaatt	tattttcaga	aaccatttta	ctattttta	taaaataaaa	gggacaaaat	240
345	ggctatttaa	ataccaacac	tattttattt	caattttagc	ctaaaatcaa	acccaattaa	300
347	ccccaaacgg	gccagccaa	ttcctaaaac	aaccggcccc	taacccgctt	atccaacccg	360
349	cccgatttcc	tcttttgate	caggccgtt	atcattttga	tcaacggcca	gaatttcccc	420
351	tttcctttt	tcattccaa	acaccccaa	acctatccca	tttctcacca	accgcccagat	480
353	ctatcctt	atctctcaa	ctctctgaa	ccttccctta	accctagcag	cctctcatca	540
355	tcctcacctc	aaaacccacc	ggccaccatg	gcctctagag	gatccccggg	tggtagtcc	600
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363	<213>	ORGANISM:	SCAN 1				
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369	<210>	SEQ ID NO:	16				
370	<211>	LENGTH:	24				
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374	<400>	SEQUENCE:	16				
375	atctgagaaa	ctctctgaa	cctt				24
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379	<211>	LENGTH:	24				
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390	<213>	ORGANISM:	SCAN 4				
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397	<211>	LENGTH:	24				
398	<212>	TYPE:	DNA				
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/31/2003
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:12; N Pos. 478,482,491,495,500,501,502,503,504,505,506
Seq#:13; N Pos. 69
Seq#:14; N Pos. 616